

1 **CLAIMS**

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3 1. A media processing system comprising:

4 a source; and

5 a software object, coupling the source to one or more of a plurality of
6 processing chains, to satisfy multiple, non-combinable requests to the source for
7 media content.

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9 2. A media processing system according to claim 1, wherein the software
10 object is a segment filter.

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12 3. A media processing system according to claim 1, wherein the software
13 object is exposed from an operating system executing on a computing system
14 implementing the media processing system.

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16 4. A media processing system according to claim 1, wherein non-combinable
17 requests for media include one or more of requests where a source time of the
18 requested content do not align, requests where project time of the requests do not
19 align, and/or requests where the requested content is to be processed differently,
20 thus requiring a separate processing chain.

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1 5. A media processing system according to claim 4, wherein the software
2 object is implemented within a filter graph representation of a user-defined media
3 processing project, to reduce invoked instances of the media source required to
4 satisfy said non-combinable requests.

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6 6. A media processing system according to claim 1, wherein the software
7 object receives independent requests for content from one or more media
8 processing chains.

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10 7. A media processing system according to claim 6, wherein the software
11 object generates and issues seek command(s) to satisfy said requests.

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13 8. A media processing system according to claim 1, wherein the media
14 processing system selectively invokes multiple instances of the software object to
15 satisfy multiple simultaneous requests for content, wherein each instance of the
16 software object requires an associated instance of the media source and a
17 processing chain.

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19 9. A media processing system according to claim 1, wherein the software
20 object serializes multiple simultaneous requests for media content received from
21 multiple processing chains.

1 **10.** A media processing system according to claim 1, wherein the software
2 object is a segment filter in a filter graph of filters dynamically generated to
3 process media in accordance with a user-defined processing project.

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5 **11.** A media processing system comprising:

6 a source;

7 a software object, coupling the source to one or more of a plurality of
8 processing chains, to satisfy multiple, non-combinable requests to the source for
9 media content; and

10 a scalable, dynamically reconfigurable matrix switch having a plurality of
11 inputs and a plurality of outputs;

12 at least one matrix switch input being communicatively linked with a
13 first processing chain portion;

14 at least one other matrix switch input being communicatively linked
15 with a second processing chain portion;

16 the matrix switch being configured to dynamically couple one or
17 more of the matrix switch inputs to one or more of the matrix switch
18 outputs.

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20 **12.** The media processing system of claim 11, wherein the matrix switch is
21 configured to dynamically couple said one or more matrix switch inputs to said
22 one or more matrix switch outputs based, at least in part, on a media time
23 associated with a user defined media processing project.

1 **13.** The media processing system of claim 11, wherein the matrix switch is
2 configured to dynamically couple said one or more matrix switch inputs to said
3 one or more matrix switch outputs based, at least in part, on a project time
4 associated with a user defined media processing project.

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6 **14.** The media processing system of claim 11, wherein the matrix switch is
7 configured to dynamically couple said one or more matrix switch inputs to said
8 one or more matrix switch outputs based, at least in part, on content of a matrix
9 switch programming grid.

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11 **15.** The media processing system of claim 11, wherein the matrix switch is
12 configured to dynamically couple said one or more matrix switch inputs to said
13 one or more matrix switch outputs based, at least in part, on a media time
14 associated with a user defined media processing project, a project time associated
15 with the user defined media processing project, and content of a matrix switch
16 programming grid.

1 **16.** A media processing system comprising:
2 a source; and
3 a software object, coupling the source to one or more of a plurality of
4 processing chains, to satisfy multiple, non-combinable requests to the source for
5 media content, wherein non-combinable requests for media include one or more of
6 requests where a source time of the requested content do not align, requests where
7 project time of the requests do not align, and/or requests where the requested
8 content is to be processed differently, thus requiring a separate processing chain;
9 wherein the software object is a segment filter in a filter graph of filters
10 dynamically generated to process media in accordance with a user-defined
11 processing project.

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13 **17.** The media processing system of claim 16 further comprising a
14 scalable, dynamically reconfigurable matrix switch having a plurality of inputs
15 and a plurality of outputs; at least one matrix switch input being communicatively
16 linked with a first processing chain portion; at least one other matrix switch input
17 being communicatively linked with a second processing chain portion; and
18 the matrix switch being configured to dynamically couple one or more of
19 the matrix switch inputs to one or more of the matrix switch outputs.

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21 **18.** The media processing system of claim 17, wherein the matrix switch
22 is configured to dynamically couple said one or more matrix switch inputs to said
23 one or more matrix switch outputs based, at least in part, on a media time
24 associated with the user defined media processing project.
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1 **19.** The media processing system of claim 17, wherein the matrix switch
2 is configured to dynamically couple said one or more matrix switch inputs to said
3 one or more matrix switch outputs based, at least in part, on a project time
4 associated with the user defined media processing project.

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6 **20.** The media processing system of claim 17, wherein the matrix switch
7 is configured to dynamically couple said one or more matrix switch inputs to said
8 one or more matrix switch outputs based, at least in part, on content of a matrix
9 switch programming grid.